UNIVERSITY OF FLORIDA | IFAS EXTENSION

Friday's Feature
By
Theresa Friday
August 12, 2006

Allow your garden to benefit from beneficial insects

During the summer, gardeners will notice an increase in insects in their gardens and landscapes. But before you grab the bug spray, take a closer look. Some of those creatures are beneficial insects that can be a gardener's best friend, pollinating your flowers and even helping to control unwanted pests.

More than one million insect species have been identified, and nearly 100,000 live in North America. However, only a few species actually damage landscape plants. Many insects perform functions that are considered beneficial to humans.

Insects that act as natural enemies are important in managing insect pests in our gardens. Natural enemies are living creatures that eat those insects that we consider pests. Natural enemies can include spiders, birds and insects such as ladybeetles, lacewings and praying mantids. Insects that act as natural enemies either through parasitism or predation are often referred to as beneficial insects.

Attracting and maintaining a population of beneficial insects can be an important tool in managing insect pests with a minimum of pesticide sprays. Encouraging beneficial insects to control the pest insects makes sense because it saves money, energy and reduces the amount of pesticides that you need to apply.

To be successful in using beneficial insects, it's very important to learn to recognize not only the adult stage but the larval stage of these important creatures. For example, ladybeetles have larvae that look nothing like the adult. Some people believe the larvae look like small orange and black alligators; however, there is great diversity in the ladybeetle family. Sometimes, gardeners mistake the ladybeetle larvae for pests and spray chemical pesticides that kill them. This results in increased problems from real pests.

The larvae stage of the ladybeetle looks nothing like the adult stage

To learn to recognize insects, look in the nature section of the local library or your favorite bookstore for insect identification guides. University of Florida IFAS offers several online publications to help identify beneficial insects. These are available at http://edis.ifas.ufl.edu/IN002, http://edis.ifas.ufl.edu/IN003, http://edis.ifas.ufl.edu/IN012 and http://edis.ifas.ufl.edu/in013.

Once you can identify a beneficial insect, you can encourage them to work in your landscape by providing them food, water and shelter. Flowers that produce nectar and pollen are used as food by the adults of many beneficial insects. Plants with very small flowers are the best nectar sources for small parasitoids and are also suitable for larger predators. Offering a variety of flowers encourages a variety of natural enemies.

Some plants that will attract beneficial insects include fennel, coriander, dill, yarrow and mint. One perennial that attracts a wide variety of insects is Joe Pye weed. You'll be amazed at how many insects will find this plant.

Once beneficial insects show up in your garden, be sure to cut down on the use of pesticides. Many pesticides are non-selective and will kill all kinds of insects, not just the pests. If a pest population increases to the point of justifying control, use environmentally-friendly options.

Assassin bugs are fierce predators of other insects.

Choose biorational pesticides when controlling pests. These are environmentally friendly alternatives and will help to maintain the population of beneficial insects. Landscape and garden biorational pesticides include insecticidal soaps, horticultural oils and products that contain Bacillus thuringiensis (commonly referred to as Bt). Bt is a type of bacterium that infects and controls caterpillars.

Another option is to spray pest insects with a heavy stream of water. This may be all that is needed to control small outbreaks of certain pests such as aphids and mites. The stream of water is effective at dislodging pests from infested plants.

But before treating, remember that leaving a few pest insects is a great way to attract the beneficial insects. Tolerating a minor infestation and a little plant damage will benefit the helpful insects.

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names, if used in this article, is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others. For additional information about all of the county extension services and other articles of interest go to: http://www.santarosa.fl.gov/extension